PROJECT COMMUNICATION HANDBOOK

First Edition
Revision 0
February 14, 2003



Office of Project Management Process Improvement 1120 N Street, Mail Station 28 Sacramento, CA 95814 www.dot.ca.gov/hq/projmgmt

Project Communication Handbook February 14, 2003 Rev 0

Preface

The California Department of Transportation (Department) *Project Communication Handbook* provides an updated overview of project communication at the Department.

This version is effective as of February 14, 2003.

The project team thanks all individuals within the districts and headquarters for their support and contributions to the production of this handbook.

Purpose This document provides an overview of the basic concepts and processes

that guide project communication at the Department. The purpose of the *Project Communication Handbook* is to assist the project team in identifying internal and external stakeholders, and to enhance communication

among all parties involved.

Audience Department project managers and other staff acting in a project

management capacity.

Background This is the 1st edition of the *Project Communication Handbook*.

Revisions Revision 0 represents the original version of the 1st edition.

Conventions Titles of books and other documents appear in *italics*.

Web site URLs appear in **bold italics**.

Supplementary information appears in the left margin alongside normal

text in the right column.

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OVERVIEW

This chapter summarizes Department project communication. It:

- ▶ Defines what "project communication" and "project communication management" mean at the Department
- ▶ Explains the purpose and goals of project communication management at the Department

What Is Project Communication?

Project communication is the exchange of project-specific information. Effective communication creates understanding of the information given and received.

For more information about project stakeholders, see the Project Management Handbook.

The project team must provide timely and accurate information to all stakeholders (people affected by a project). Members of the project team prepare information in a variety of ways to meet the needs of various project stakeholders. Team members also incorporate feedback from these stakeholders.

Project communication differs from general communication in that it centers on the Work Breakdown Structure (WBS). For details about the WBS, see "Work Breakdown Structure" on page 29.

For each WBS element, there are:

- ▶ Suppliers who provide inputs needed for the WBS element
- ▶ Task managers who are responsible for delivering the WBS element
- ▶ Customers who receive the products of the WBS element

Suppliers must communicate with the task managers, and the task managers must communicate with suppliers and customers. The supplier is often the task manager for an earlier deliverable in the project lifecycle; the customer may be a task manager for a later deliverable. Good project communication includes notifying the next task manager in the project delivery chain about when to expect a deliverable.

The project communication plan is a part of the overall project plan. It builds on the project workplan, which shows:

- ▶ What will be produced on the project the project WBS
- ▶ Who will produce it the Resource Breakdown Structure (RBS)
- ▶ When it will be produced

For more information, see "Prepare the Communication Plan Draft" on page 17.

For more information about task managers, see the Project Management Handbook.

What Is Project Communication Management?

"Project communication management includes the processes required to ensure timely and appropriate generation, collection, dissemination, storage, and ultimate disposition of project information."

Task managers responsible for a deliverable need to know why the customers want it, what features they want, how long it will take, and how they want to receive it. Task managers tell their customers exactly when to expect the deliverable. If that deliverable is a WBS element on the critical path, it is even more important that task managers inform their internal customers when the deliverable will arrive. The recipient functional managers must have their staff ready to start work immediately after it arrives.

Task managers must ensure that internal customers know about any changes in the delivery date so that recipient functional managers can schedule their resources accordingly. Task managers follow up with the customer of each deliverable. The task is not complete merely because the final product is delivered to the customer. Task managers contact the customers to confirm that the deliverable met their needs and expectations. Task managers should enter feedback that others might use in future projects into the lessons learned database and into the Department's guidance and training materials.

Why Do We Do It?

Project communication management tools and techniques ensure the timely and appropriate generation, collection, dissemination, storage and ultimate disposition of project information.

Department project managers use project communications management to:

- ▶ Develop a communication plan for the project
- ▶ Distribute information via the methods that reach customers most effectively
- ▶ File data using the Project Development Uniform Filing System and Construction Organization of Project Documents
- Archive records in accordance with Department Records Retention policies

¹ PMBOK Guide -2000 Edition, page 117

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PROCESSES

This chapter explains the various processes involved in Department project communication.

OVERVIEW PROCESSES

Overview

Understanding the communication process is the first step in communication planning. Consider these four factors:

- ▶ Who is involved in the communication process the identified stakeholders, such as project management and staff, customer management and staff, and external stakeholders
- ▶ What is being communicated the message; the information being communicated
- ▶ When the information is communicated weekly, monthly, quarterly, as needed, or as identified
- ► How the information is disseminated in a meeting, a memorandum, an email, a newsletter, a presentation, etc.

For more information about the roles of the customers, Deputy District Director for Program and Project Management (DDDPPM), and District Director, see the *Project Management Handbook*.

Develop the Communication Plan

Preparing the project communication plan assists the project team in identifying internal and external stakeholders and enhances communication among all parties involved in the project. The project team writes a communication plan to ensure that an effective communication strategy is built into the project delivery process. The plan is a framework and should be a living, evolving document that can be revised when appropriate. The communication plan is part of the project management plan. Figure 1 shows the steps in the development of the communication plan.

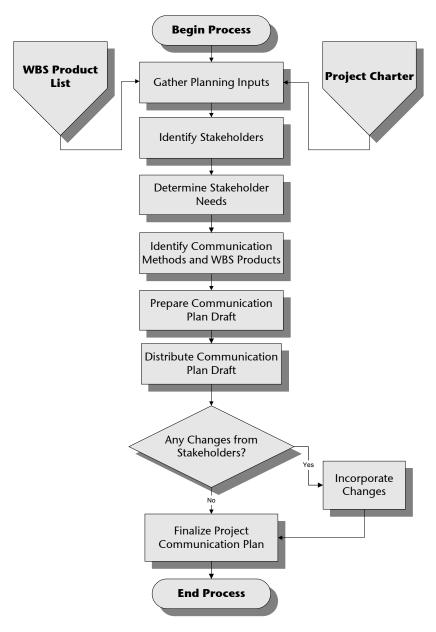


Figure 1. Communication plan flowchart

The project development team (PDT) develops a communication plan by asking the following questions:

- ▶ Who needs what information?
- ▶ When do they need the information?
- Who delivers the information?
- ▶ How should the information be delivered?

While all projects share the need to communicate project information, the specific information needs and the methods of distribution may vary widely.

Gather Planning Inputs

The PDT develops two inputs to the project communication planning process:

- ▶ WBS product list a list of potential project products, based on the workplan, that includes all the elements of the WBS, and the subproducts of the WBS.
- ▶ Project charter the record of the agreement between the sponsor and the project manager on the key elements of a project. The project charter lists the project manager, project sponsor, and the PDT (for further details about the project charter, see the *Project Management Handbook*).

Identify Stakeholders

The project team must identify the stakeholders on a project, determine what their needs and expectations are, and then manage and influence those expectations to ensure a successful project.

The PDT brainstorms a list of stakeholders using the roles identified in the *Project Management Handbook* and the RBS list of functional areas.

Determine Stakeholder Needs

Project stakeholders have information and communication needs. Identifying the information needs of the stakeholders and determining a suitable means of meeting those needs are important factors for project success.²

The key to successful community involvement is communicating with external project stakeholders early and often.

For more information about external project stakeholders, see "Involve the Community" on page 24.

As early as possible, the PDT assigns team members to contact local, regional, state, and federal agencies that have even a minor stake in a project. By working with these agencies from the earliest stages, the project team reduces the chance of conflict at critical times.

For more information about the PDT, see the *Project Management Handbook*.

² PMBOK Guide - 2000 Edition, page 119

Identify Communication Methods and WBS Products

Project team members and stakeholders use different communication methods at particular times during the project lifecycle. For examples of communication methods, see "Communication Methods" on page 30.

The project team uses the WBS product list to identify the products that may be needed on the project. The PDT identifies:

- ▶ Who produces the product
- ▶ Who receives the product
- ▶ The method of product transmittal

This information is tied directly to WBS elements and sub-products required for the project. The communication matrix includes all the information needed to manage project communication.

Prepare the Communication Plan Draft

The project communication plan includes the information needed to successfully manage project product deliverables.

The project communication plan includes the following:

- ▶ Brief introduction and background answers the question, "Why do we need a project communication plan?"
- ▶ A list of the project sponsor, project manager, PDT members, and other key stakeholders
- ▶ Methods of communications to be used, including formal meetings to be held (who, what, when, how)
- ▶ Project reporting information answers the question, "How will project performance be collected and disseminated to the internal and external project stakeholders?"
- ▶ Stakeholders analysis includes internal stakeholders (name and contact information) identified by RBS number and function, and external stakeholders (name and contact information) identified by agency or organization. The stakeholders analysis is designed to help the PDT analyze internal and external stakeholder needs by gathering the following information from each stakeholder:
 - Goals for the project. What is each stakeholder's desired outcome for the project? If stakeholders have contradictory goals, the assigned team member brings this to the attention of the project manager. The project manager should ensure at the start that there is a consistent vision for the project. Early misunderstandings can escalate into major conflicts later in the project.

- Preferred methods of communication. Project team members will use this information as a means to meet individual communication needs. If the team cannot reasonably communicate through each stakeholder's preferred medium, the team needs to negotiate a method to ensure that each stakeholder receives and understands the project communication.
- Preferred method for rewarding the team, within the constraints of what is achievable. The PDT uses this information to plan appropriate celebrations at the completion of each project component. For a list of possible rewards, see "Decide How to Reward the Team" on page 19.

For a stakeholders analysis template, see "Appendix A: Stakeholders Analysis" on page 34. For a sample stakeholders analysis, see "Appendix C: Sample Communication Plan" on page 36.

- Product list is the input. It includes the WBS codes, WBS titles, subproducts, and Uniform Filing System location numbers. The list also indicates which sub-products should be filed in the project history file (PHF). To complete the communication matrix, the PDT indicates if the sub-product is required, who produces it, who receives it, the method of transmittal, and the date submitted. For a communication matrix template, see "Appendix B: Communication Matrix" on page 35. For a sample communication matrix, see "Appendix C: Sample Communication Plan" on page 36.
- ➤ Conflict management strategy designed to make issues between project stakeholders more manageable. For more information, see "Develop a Conflict Management Strategy" on page 19.

Templates for the stakeholders analysis and the communication matrix are available on the Internet at:

http://www.dot.ca.gov/hq/projmgmt/guidance.htm

The project manager assigns a team member to complete the draft project communication plan for each appropriate project component:

- ▶ Project Initiation Document (PID)
- ▶ Permits and Environmental Studies
- ▶ Plans, Specifications, and Estimates (PS&E)
- Right of Way
- ▶ Construction

Decide How to Reward the Team

Some rewards that are achievable in California State service are:

- ▶ Gold and Silver Superior Accomplishment awards
- ► End-of-component team celebration sponsored by appropriate managers or project sponsors
- ▶ Certificates and letters of appreciation from the District Director, Deputy District Director, or other appropriate manger
- ▶ Certificates and letters of appreciation from local agencies and other external stakeholders
- ▶ Excellence in Transportation awards presented by the Department
- ► Tranny awards presented by the California Transportation Foundation
- Purcell, Roberts, and Moskowitz awards presented by the Department
- ► Excellence in Highway Design awards presented by the Federal Highway Administration
- ► Environmental Excellence awards presented by the Federal Highway Administration
- ▶ Public Affairs Skills awards presented by the Federal Highway Administration

Develop a Conflict Management Strategy

A good communication plan includes a conflict management strategy. Project managers minimize conflicts and resolve issues through constant communication with the project sponsor(s), project team members, and other project stakeholders. Project managers can use the sample strategy that appears later in this section, or can develop a more specific strategy.

The project manager negotiates and/or mediates conflict resolution. Project managers encourage project stakeholders to seek win-win solutions to their problems when possible. Because the project manager discusses and develops a conflict management strategy before the project begins, issues are more manageable. The project manager documents in the project record any decisions that utilize the conflict management strategy.

Figure 2 shows an overview of conflict management.

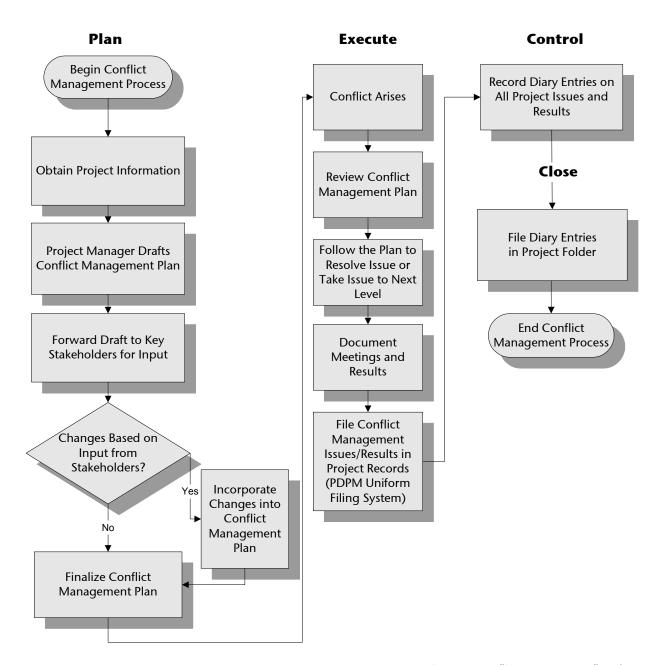


Figure 2. Conflict management flowchart

The project manager prepares the conflict management strategy with input from stakeholders. Stakeholders use this strategy to resolve issues at any time during the project.

Sample Conflict Management Strategy

The project manager and the project stakeholders meet and agree to attempt to resolve all conflicts at an individual level as much as possible. Two (or more) parties with a dispute will meet and use the following guidelines:

▶ To resolve conflicts within the scope of the project:

Step	Action
1	Acknowledge the conflict.
2	Establish ground rules.
3	Establish common ground and shared goals.
4	Separate the problem from the people.
5	Have the parties share collected data related to the conflict.
6	Explore solutions, listing as many alternatives as possible.
7	Evaluate solutions, looking for a win-win solution.
8	Select the best solution.
9	Share the solution with the project stakeholders.

If a conflict cannot be resolved at an individual level, the conflict may need to be addressed by the project manager with the functional manager or the DDDPPM.

Each time stakeholders meet to resolve a conflict, they record the following information:

- ▶ Issues
- Meeting date and location
- Attendees
- ▶ Results of meeting

Distribute the Communication Plan Draft

For complete definitions of task managers and functional managers, see the Project Management Handbook.

The project manager sends the draft project communication plan to the project stakeholders for review and input. When reviewing the communication matrix, functional managers ensure that a task manager is assigned to each sub-product listed in the functional manager's area of responsibility. The functional managers list all the assigned task managers on the communication matrix and the stakeholders analysis. For templates and samples, see the "Appendices" on page 33.

Incorporate
Changes and
Finalize the
Communication
Plan

The project manager or team members incorporate changes from the project stakeholders into the project communication plan. The project manager then distributes the final project communication plan to the PDT. The project management support unit (PMSU) uses the finalized project communication matrix to track the progress of project deliverables. (For a sample of a completed project communication plan, see "Appendix C: Sample Communication Plan" on page 36.)

Processes Distribute Information

Distribute Information

For a complete definition of a stakeholder, see the Project Management Handbook.

Proper information distribution makes information available to project stakeholders in a timely manner. Following the communication plan ensures that all members of the project team are aware of their responsibilities to communicate with external stakeholders. The more information stakeholders have regarding a project or deliverable, the less likely last minute conflicts, changes, or complaints will affect a project.

Team members can improve overall project communication by adhering to the following communication guidelines:

Awareness

- Base communication strategies on stakeholder needs and feedback.
- Ensure that communication is shared in a timely manner.

▶ Content

- Advocate open, honest, face-to-face, two-way communication.
- Create an environment where project team members and other stakeholders can constructively challenge behavior and ideas.

▶ Context

- Remember that communication is two-way. Listen as well as deliver the message.
- Involve senior management when appropriate.

▶ Communication flow

- Coordinate communication with project milestone events, activities, and results.
- Include key stakeholders in developing an interest-based conflict management process.

▶ Effectiveness

- Conduct regular assessments of the communication plan and process.
- Communication must focus on the customer.

▶ Format and media

- Take advantage of existing communication vehicles and opportunities.
- The project team has a variety of methods to share information. For examples, see "Communication Methods" on page 30.

Involve the Community

The Department has adopted a number of policies that encourage community involvement and building partnerships. The key to successful community involvement is communicating with external project stakeholders early and often. Project team members must be familiar with the Department's policies and procedures related to:

- ➤ Community involvement extensive information related to working with external project stakeholders, including preparing community involvement plans, can be found in the *Project Development Procedures Manual (PDPM)*, Chapter 22. All project team members must be aware of this information and follow established procedures. For more information, see the complete chapter at: http://www.dot.ca.gov/hq/oppd/pdpm/chap_htm/chapt22/chapt22
- Context sensitive solutions the Department has adopted a number of policies that encourage designers to respond to community values where state highways serve as main streets. The Department tries to accommodate a community's values when discussing the design of projects with community stakeholders. The Director's Policy on Context Sensitive Solutions details the roles and responsibilities of all project team members. For more information, see the complete policy statement at:

http://www.dot.ca.gov/hq/oppd/context-solution.pdf

▶ **Accommodating non-motorized travel** — the Department fully considers the needs of non-motorized travelers (including pedestrians, bicyclists, and persons with disabilities) in all programming, planning, maintenance, construction, operations, and project development activities and products. The *Deputy Directive on Accommodating Non-Motorized Travel* details the roles and responsibilities of project team members. For more information, see the complete policy statement, at:

http://www.dot.ca.gov/hq/oppd/non-motor-travel.pdf

▶ **Public information** — the Department has an established policy on public information. Project team members must be familiar with this policy and understand their roles and responsibilities related to the dissemination of public information. Headquarters Public Affairs provides information about statewide and policy concerns, while District Public Affairs Offices answer questions related to local and/or internal District operations.

Report Communication Performance

Throughout the project, team members assess the project communication plan. The original plan provides adequate information to manage project communication. However, it is important to verify whether the project communication plan is effective.

Periodically, the project manager asks the project stakeholders if the project communication is sufficient to suit their needs. In some cases, project stakeholders may need greater detail or more frequent delivery. In other cases, certain stakeholders may need summary information, or may request notification only if problems arise.

▶ To evaluate and report communication performance:

Step	Action
1	Review the project communication plan.
2	Solicit feedback from the project stakeholders, verbally or in writing, as to whether the current information or communication method is adequate, based on the following criteria:
	➤ Type of information
	► Frequency of information
	Depth/detail of information
	► Format of information
	► Method of transmittal
3	Discuss the stakeholder feedback with the PDT.
4	Update the project communication plan if needed.

Maintain and Archive Project Records

From the start of the project until the award of the construction contract, the Project Engineer maintains a set of project records. These are organized and indexed according to the Project Development Uniform Filing System. From construction award to final closeout, the Resident Engineer maintains a set of project records that are organized and indexed according to the Construction Organization of Project Documents.

These filing systems address one of the most error-prone aspects of project communication — communication over long spans of time. In many cases, the recipients of deliverables may not need the deliverables until several years after they are produced. The future recipient must know where to find the deliverable and understand previous project decisions, even though the task manager and other project team members are no longer available.

For more information about these filing systems, see "Filing Systems" on page 28.

The project team archives the PHF when the project is complete. This file consists of selected project development records and final project records. These include all letters, memos, reports, etc., that document project decisions, or that would be useful to develop a subsequent project.

The *PDPM* indicates which project development records are included in the PHF and describes the archival process. For more information, see the complete chapter at:

http://www.dot.ca.gov/hq/oppd/pdpm/chap_htm/chapt07/chapt07. htm

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Tools AND METHODS

This chapter describes some of the communication tools and methods used by Department project team members. Stakeholders must choose appropriate tools and methods to accomplish the communication task at hand.

Communication Tools

Project team members use a variety of tools to organize and present project information.

Project Fact Sheet

The project fact sheet contains summary data for stakeholders outside the project team, and is typically posted on the project website. No set standard exists for a project fact sheet. Districts use information from the project charter and other sources. The table below shows what information is in the charter as compared to the fact sheet.

Information	Charter	Fact Sheet
Background	Х	Х
Project purpose	Х	Х
Project component objectives	Х	
Project description/scope statement	Х	Х
Project/component constraints, assumptions and risks	Х	
Component deliverables	Х	
Key team members	Х	
Deliverable management process	Х	
Location map	Х	Х
Major milestone delivery dates		Х
Estimated cost		Х
Project contacts		Х

Filing Systems

A filing system is a set of agreed-upon folder and file naming conventions used to classify project documents to make them easier to find. It is, essentially, a numbering scheme used to identify different types of documents and the folders where they are stored. All project records must be filed according to the following file systems:

➤ The Project Development Uniform Filing System — the standard filing system for project records up until the award of the construction contract.

For more information, see Chapter 7 of the *PDPM* located at: http://www.dot.ca.gov/hq/oppd/pdpm/chap_htm/chapt07/chapt07.htm

▶ The Construction Organization of Project Documents — the standard filing system for project construction records from the award of the construction contract onwards.

Tools and Methods Communication Tools

For more information, see Section 5-102 of the *Construction Manual* located at:

http://www.dot.ca.gov/hq/construc/manual2001/chapter5/chp5_1.pdf

Work Breakdown Structure

The WBS is a deliverable-oriented grouping of project elements that organizes and defines the total scope of the project. Project communication relates to WBS elements. Team members use the WBS and RBS to create the communication plan. For more information about the WBS, see http://www.dot.ca.gov/hq/projmgmt/guidance.htm

Resource Breakdown Structure

The RBS is a standardized, hierarchical list of roles that might be needed to produce a project deliverable. Project team members use the RBS to determine what roles are needed to produce project-specific WBS elements and to identify who needs to receive certain communication products. For more information about the RBS, see

http://www.dot.ca.gov/hq/projmgmt/guidance.htm

Project Charter

The project charter documents the agreement between the sponsor and the project manager over the key elements of a project and component. The charter helps the project manager guide the project team efficiently and effectively through the project development process.

Communication Methods

Project team members use a variety of communication methods to deliver project information, including meetings, telephone calls, email, voicemail, and websites. Meetings in particular are often the most effective way to disseminate information to project stakeholders. Before planning a meeting, the project manager or assigned team member should consider the communication objectives carefully and choose a meeting format that will meet the objectives.

For more information about the applicability, format, publicity, and considerations for meetings, see Chapter 22 of the *PDPM*, located at: http://www.dot.ca.gov/hq/oppd/pdpm/chap_htm/chapt22/chapt22.htm

Project team members use meetings and many other communication methods:

Method	Purpose	Responsibility	Frequency	Audience
Project development team meeting	Develop a formal document called the baseline workplan, which is used to define, monitor, and manage project execution.	Project manager	Weekly until baseline workplan is signed	Project manager and all stakeholders
	Identify the basic task elements of a project and assess the resource needs for delivering a project within an assigned time frame.			
Project management senior staff meeting	Communicate changes in Department policy or procedures, manage program expectations, and enhance training processes.	DDDPPM	Weekly at designated time	Project manager and functional managers
Project status review meeting	Report status and progress of scheduled milestones and activities. Identify and discuss problems and solutions for project obstacles.	DDDPPM	Monthly at designated time	Project manager, DDDPPM, and database administrative staff
Project team meeting	Report status and progress of scheduled milestones and activities. Identify and discuss project issues and corrective actions.	Project manager	As needed (weekly, monthly, quarterly, or ad hoc)	Project manager, functional managers, and task managers
Office meeting	Report status and progress of scheduled tasks. Identify and discuss project issues and corrective actions.	Project manager, functional manager, or task manager	As needed	All stakeholders

Tools and Methods Communication Methods

Method	Purpose	Responsibility	Frequency	Audience
External customer and/or supplier meeting	Involve external customers and suppliers in the project For more information, see "Involve the Community" on page 24.	Project manager, functional manager, or task manager	As needed	All stakeholders
Project Internet site	Report status and progress of scheduled milestones and activities.	Webmaster	Monthly or as needed	All stakeholders
Teleconference	Communicate changes in Department policy or procedures, manage program expectations, and enhance training processes. Report status and progress of scheduled milestones and activities. Identify and discuss problems and solutions for project obstacles.	Varies	Weekly at designated time	HQ staff, project manager, DDDPPM
Correspondence (letters, memos, email, etc.)	Document status of action items, decisions made, and problems encountered.	All stakeholders	As needed	All stakeholders
Site visit	Identify and discuss problems and solutions for project obstacles.	Project manager or functional manager	As needed	All stakeholders



APPENDICES

The Appendices contain templates and samples of the various pieces of the communication plan.

Appendix A: Stakeholders Analysis

The project manager assigns team members to create the stakeholders analysis with input from the PDT members. Figure 3 shows the stakeholders analysis template.

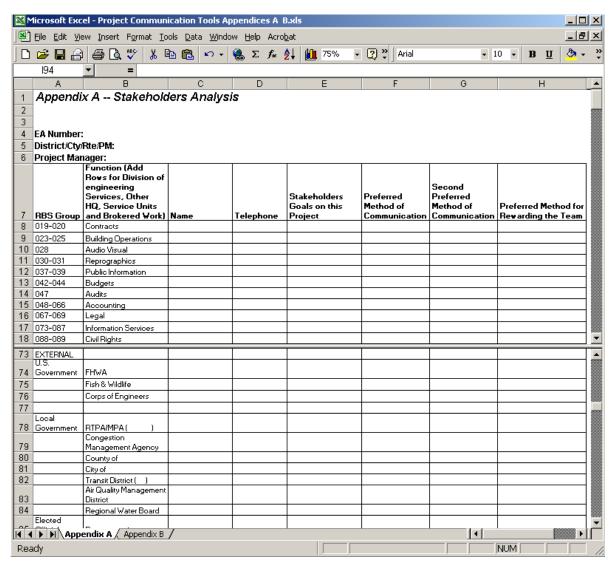


Figure 3. Stakeholders analysis template

Appendix B: Communication Matrix

The project manager assigns team members to create the communication matrix with input from the PDT members. Figure 4 shows the communication matrix template.

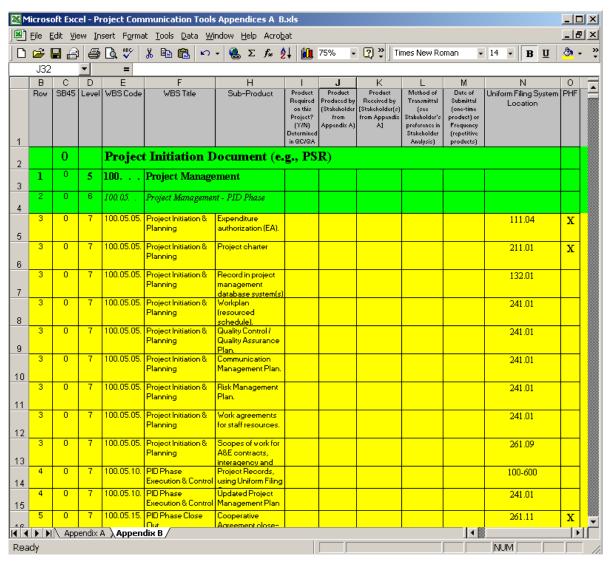


Figure 4. Communication matrix template

Appendix C: Sample Communication Plan

Figures 6 through 11 show a sample communication plan.

Project Communication Plan District 8 Project 34040K SB-395

Permits and Environmental Studies Phase

Introduction and Background

The purpose of the Project Communication Plan is to provide consistent and timely information to all project stakeholders. This plan will assist the project team in building an effective communication strategy to enhance communication throughout project delivery.

This project is one of the two segments of the proposed improvements on US-395 from I-15 to SR-14. The location of this project is from the junction of I-15/US-395 to 0.5 miles south of Farmington Road. The first part of this segment from I-15 to Purple Sage Road will be realigned and widened to a 4 or 6-lane freeway. The second portion from Purple Sage Road to Farmington Road will be widened to a 4-lane expressway.

Project Team Representatives

Project Sponsor: Frank White Project Manager: Lisa Gonzales

Assistant Project Manager: Maher Ahmad

The PDT is made up of the following Project Team Representatives:

Name	Division	Telephone
Lisa Gonzales	Project Management	(909) XXX-XXXX
Maher Ahmad	Project Management	(909) XXX-XXXX
Wendy Young	Design I	(909) XXX-XXXX
Donald Johnson	Planning	(909) XXX-XXXX
Michael Burns	Environmental Cultural Studies	(909) XXX-XXXX
Allen Wong	Construction	(909) XXX-XXXX
Ram Vapari	Design I	(909) XXX-XXXX
Tanya Khan	Materials	(909) XXX-XXXX
Mary Lee	Environmental Project Management	(909) XXX-XXXX
Ian Jones	Right of Way	(909) XXX-XXXX
Ricky Scott	Public Affairs	(909) XXX-XXXX
Vlade Jurko	Project Management/HQ	(909) XXX-XXXX
John Allen	Environmental	(909) XXX-XXXX
Linda Brown	Land Surveying	(909) XXX-XXXX
Shawna Smith	Land Surveying	(909) XXX-XXXX
Ferouz Syed	Environmental Bio and Permit	(909) XXX-XXXX

Figure 5. Sample communication plan

Community Involvement

In March 1990, the Department developed a Community Involvement Program for the study of the realignment of US-395. Two groups were organized: the Community Advisory Committee (CAC) and the Project Development Team (PDT). During the time of the study, the CAC had 9 meetings and the PDT had 12. Two public meetings were held, one in June 1990 and the other in August 1991. A Community Involvement Program Report was completed by Resource Management International, Inc., and accepted by the Department in July 1992.

During the period from June 1999 to July 2000, informational meetings were held between the Department, local and Federal agencies and property/business owners to discuss different alternatives of the proposed realignments. The Department's Districts 6, 8, and 9 as well as regional MPO's and RTPA's and the Counties of San Bernardino and Kern have been working in partnership with local agencies, cities and communities to find a viable alternative for the eventual upgrading of US-395.

Communication Methods

The Project Manager schedules formal monthly PDT meetings during the PA&ED phase. Notices/invitations are sent out through Lotus Notes. Meetings are held in the District 8 Conference Room. Notes will be taken and distributed to the PDT. The Project Manager also meets with the Functional Units informally on an as needed basis to discuss/resolve issues.

The Environmental Branch will be meeting regularly with the Bureau of Land Management as issues arise. The Project Manager will participate in these meetings on an as needed basis.

Project Reporting Information

District 8 utilizes an online Data Retrieval System. From this site, the user can query much of the data that is available in electronic format through the District 8 website.

Conflict Management Strategy

All parties agree to work cooperatively to avoid and resolve conflicts at the lowest level possible. If disagreements emerge which cannot be resolved, the following procedure will be followed:

- 1. All parties involved must agree that an impasse exists
- 2. All parties involved must be able to respond in the affirmative to the following statements:
 - The position taken is legal and ethical
 - > The position taken is good for our customers
 - > The position taken makes efficient use of resources
 - Each party accepts full responsibility for the position he/she is taking
 - The position taken works towards meeting project delivery goals

When the parties at the lowest level are unable to come to a solution, the problem must be escalated to the next working level.

Figure 6. Sample communication plan (continued)

EA Number:	34040K						
District/Cty/I	Rte/PM: 08-SBD-395	0.5					
Project Man	ager: Lisa Gonzales						
RBS Group	Function	Name	Telephone	Stakeholders Goals on this Project	Preferred Method of Communication	Second Preferred Method of Communication	Preferred Method for Rewarding the Team
	Project	Lisa		Efficient project			
106	Management	Gonzales	(909) XXX-XXXX	completion	email	cell phone	Team Celebration
	Project	Peggy		Project completed within cost, scope			
140	Management	Wright	(909) XXX-XXXX	and schedule	email	telephone	Team Celebration
	Program	Robert		Keep project on			
146	Management	Johnson	(909) XXX-XXXX	track	email 	telephone	Certificate
147	Capital Outlay Mgmt Envr-	Fred Carter	(909) XXX-XXXX	Secure funding	email	telephone	Team Celebration
168	Biological/Permits	Slandra Vijay	(909) >>>>	Having all mitigation	email	telephone	Team Celebration
100	biological/i elillis	vijay	(303) 700-7000	Environmental	ciliali	terepriorie	Team Celebration
				requirements			
170	Envr-Mgmt	Jim Black	(909) XXX-XXXX	covered	email	cell phone	Team Award
		Paul		Complete			L
178	Envr-Cultural	Hernandez	(909) XXX-XXXX	mitigation	email	cell phone	Team Award
195	Forecasting	David Blake	(909) XXX-XXXX	To produce accurate data	email	in person	Team Celebration
233	Design P	Fathi	(909) XXX-XXXX	plans	telephone	email	Team Celebration
233	Designi	Wendy	(808) 700-7000	Meet the functional	telebilolle	eman	Tealii Celebiatioi
236	Design I	Young	(909) XXX-XXXX	design	cell phone	email	Team Award
200	Beolgiii	Cathy	(303),000,0000	Clear and concise	cen phone	Ciriali	Teaminmana
303	Agreements	Pickett	(909) XXX-XXXX	agreements Accurate and	email	telephone	Certificate
	Surveys/RW	Nasreem		timely right of way			
308	Engineering	Maljai	(909) XXX-XXXX	maps and deeds	email	telephone	Team Celebration
24.2	Lhalasatiss	D11-	(000) 100(1000(No change	:	4-1	T 0-1-1
312	Hydraulics Materials	Ron Ho	(909) XXX-XXXX	orders/As-Builts Minimum amount	email	telephone	Team Celebration
327	Engineering	Ken Lee	(909) XXX-XXXX	of retesting	email	telephone	Team Celebration
021	Linginiooning	Norma	(000),000,000	To find acceptable	OTTIGIT	teropriorie	Todam ociobiation
332	Envr-Engineering	Sanchez	(909) XXX-XXXX	mitigation sites	email	telephone	Team Celebration
	L/S Architecture –	Peter					
340	Br. A	Tanaka	(909) XXX-XXXX	Public Support	email	telephone	Team Award
244	L/S Architecture –	Lanan Bind	(000) 100(1000(Positive feedback			T 0-1-1
341	Br. B Truck Service	Loren Bird Susan	(909) XXX-XXXX	from the public No equipment	email	telephone	Team Celebration
351	Manager	Wong	(909) >>>>	delays	email	telephone	Team Celebration
365	Operations Services	Mark Brown	(909) XXX-XXXX	No traffic accidents		telephone	Team Celebration
	o pordinono connoco	manc bronn	(000),,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Positive feedback	0111411	Loropriorio	Tourn coloniano
	Operations-	Amanda		from the public on			
368	Surveillance	Flores	(909) XXX-XXXX		email	telephone	Team Award
070	Transportation	14	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	No complaints		4-1	T 0-1-1
370	Mgmt	Kamal Ghol	(909) >>>>	from the public	email	telephone	Team Celebration District Director
375	TMP/District Traffic	Yang So	(909) XXX-XXXX	No traffic accidents	email	telephone	Recognition
513	Traffic Design –	, any ou	1000) 1000-10001	Meet the traffic	o.maii	LO/Opinonie	. coognition
380	SBD	Anita Moore	(909) XXX-XXXX	design	email	telephone	Team Celebration
				Positive feedback			
381	Traffice Design B	Ted Martin	(909) XXX-XXXX	on plans	email	telephone	Team Celebration
001	<u></u>	Nigel					
391	Freeway Systems Electrical	Gallagher Samer	(909) XXX-XXXX	Constructability Electrical systems	email	telephone	Team Celebration
392	Operations	Anssari	(909) >>>>	in place	email	telephone	Team Award
	- p suono		,	Meet electrical			
396	Electrical Design B	Frank Ortiz	(909) XXX-XXXX	design	email	telephone	Team Celebration
400	Right of Way	Jose Ferrer	(909) XXX-XXXX	RW Certification	email	telephone	Team Award
529	Field Construction	Kelly Flake	(909) >>><->>>>	Construction per design	in-basket	telephone	District Director Recognition
External	, iola Collottaction	ixeny i lake	(203) 700-7000	Goorgii	n buonet	1010pilotic	recognition
Local	SBd Co						
Governmen	Transportation	Larry Floyd	(909) XXX-XXXX	Public Support	telephone	cell phone	Team Celebration
U.S.	Bureau of Land	,, .		Stay involved until			
Governmen	Management	Patty Zhu	(909) XXX-XXXX	project is complete	email	U.S. Mail	Team Celebration

Figure 7. Sample stakeholders analysis

WBS Code	WBS Title	Sub-Product	Product Required on this Project? (Y/N)	Product Produced by (Task Manager Name)	Product Received by (Name of person receiving the product)	Method of Transmittal (mail, e- mail, fax, etc.)	Date of Submittal (one-time product) or Frequency (repetitive products)	Uniform Filing System Location	PHF
165	Perform Environmen	tal Studies And Prepare Draft	Enviror	imental Doc	ument (DED	9)			
165.05.	Perform Environmental Scoping and Select Alternatives for Study								
165.05.05.	Review Project Information	· Initial Environmental Project File Setup	Y	Jane Moore	Jane Moore/Wendy Young	mail		421.01	
165.05.10.	Public and Agency Scoping Process	Draft Notice of Intent for FHWA publication	Υ	Jane Moore	Rich Williams/FHWA	mail		331.09	X
165.05.10.	Public and Agency Scoping Process	Published Notice of Preparation with mailing list and State Clearinghouse documentation.	Y	Jane Moore	Rose Wilson	mail		231.1	X
165.05.10.	Public and Agency Scoping Process	Public Participation Plan	Υ	Public Affairs	Lisa Gonzales	e-mail		233.01	X
165.05.10.	Public and Agency Scoping Process	MPO/APCD comments on and concurrence with Public Participation Plan.	Y	Slandra Vijay	FHWA/SCAG	mail		231.09	X
165.05.10.	Public and Agency Scoping Process	Minutes, Records of Meeting, Newsletters, press materials, and Public Participation Reports for meetings and other public participation activities.	Y	Slandra Vijay	Lisa Gonzales IFHWA	mail		251.01	X
165.05.10.	Public and Agency Scoping Process	Project Mailing List	Υ	Jane Moore	Lisa Gonzales	e-mail		231.1	X
165.05.15.	Select Alternatives for Further Study	• Alternative(s) selection memo	Y	Slandra Vijay/Wendy Young	Lisa Gonzales	mail		243.01	Х
165.05.15.	Select Alternatives for Further Study	NOP/NOI Alternatives discussion (EIR/EIS projects only)	Y	Jane Moore /Design I	Rich Williams/FHWA	mail		243.01	X
165.05.15.	Select Alternatives for Further Study	Major Investment Study (MIS) if necessary	Y	Eric Wagner	Jane Moore/Wendy Young	mail		141.02	
165.05.20.	Maps for Environmental Evaluation	Adequate project maps for initiation of environmental studies for the selected alternatives.	Υ	WendyYoung	Jane Moore/Rich Williams	mail		472.01	
165.10.	Perform General Environmental Studies	All technical study reports necessary for the preparation of the environmental document for a project, other than those related to Biology (See WBS activity 165.15) and Cultural Resources (see WBS activity 165.20).	>	Ferouz Syed	Jane Moore	mail			
165.10.05.	Surveys and Mapping for Environmental Studies	Site maps for environmental studies	Υ	WendyYoung	Jane Moore	mail		472.01	
165.10.10.	Right of Entry for Environmental Studies	• Formal Rights of Entry	Y	lan Jones	Ferouz Syed/Betty Simpson	mail		371.09	X
165.10.10.	Right of Entry for Environmental Studies	Informal entry documents - Includes verbal agreements, etc.	Y	lan Jones	Ferouz Syed/Betty Simpson	mail		371.09	X
165, 10, 10,	Right of Entry for Environmental Studies	Personnel identification documents	Υ	Clark Thompson	Ferouz Syed/Betty Simpson	mail		371.09	X
165,10,15,	Community Impact, Land Use, and Growth Studies	Technical Report	Y	Clark Thompson	Rich Williams/FHWA /Clark Thompson	mail		231.04	X
165, 10, 15,	Community Impact, Land Use, and Growth Studies	Technical report Abstract for use in Environmental Document text	Y	Clark Thompson	Clark Thompson /Rich Williams	mail		231.04	X

Figure 8. Sample communication matrix

WBS Code	WBS Title	Sub-Product	Product Required on this Project? (Y/N)	Product Produced by (Task Manager Name)	Product Received by (Name of person receiving the product)	Method of Transmittal (mail, e- mail, fax, etc.)	Date of Submittal (one-time product) or Frequency (repetitive products)	Uniform Filing System Location	PHF
165, 10, 15,	Community Impact, Land Use, and Growth Studies	Transmittal memo with proposed mitigation measures and mitigation effectiveness evaluation	Y	Clark Thompson	Clark Thompson /Rich Williams	mail		231.02	X
165,10,20,	Visual Impact Analysis	Visual Simulations and Exhibits	Y	Peter Tanaka	Clark Thompson /Rich Williams	mail		231.01	X
165.10.20.	Visual Impact Analysis	Technical Report	Y	Peter Tanaka	Clark Thompson /Rich Williams	mail		231.01	X
165.10.20.	Visual Impact Analysis	Technical report Abstract for use in Environmental Document text	Y	Peter Tanaka	Clark Thompson /Rich Williams	mail		231.01	Х
165.10.20.	Visual Impact Analysis	Transmittal memo with proposed mitigation measures and mitigation effectiveness evaluation	Y	Clark Thompson	Clark Thompson /Rich Williams	mail		231.02	Х
165.10.25.	Noise Study	Preliminary Noise Barrier Plans	Y	Norma Sanchez	Clark Thompson /Rich Williams /WendyYoung	mail		231.04	X
165,10,25.	Noise Study	Technical Report	Y	Norma Sanchez	Clark Thompson /Rich Williams /Wendy Young	mail		231.04	X
165,10,25,	Noise Study	Technical report Abstract for use in Environmental Document text	Y	Norma Sanchez	Clark Thompson /Rich Williams /WendyYoung	mail		231.04	X
165,10,25,	Noise Study	Transmittal memo	Y	Norma Sanchez	Clark Thompson /Rich Williams /WendyYoung	mail		231.02	X
165,10,30,	Air Quality Study	Monitoring Report	Y	Norma Sanchez	Clark Thompson /Rich Williams /Wendy Young	mail		231.04	X
165,10,30,	Air Quality Study	Technical Report	Y	Norma Sanchez	Clark Thompson /Rich Williams /Wendy Young	mail		231.04	X
165,10,30,	Air Quality Study	Technical report Abstract for use in Environmental Document text	Y	Norma Sanchez	Clark Thompson /Rich Williams /WendyYoung	mail		231.04	X
165,10,30,	Air Quality Study	Transmittal memo	Y	Norma Sanchez	Clark Thompson /Rich Williams /Wendy Young	mail		231.02	X
165,10,30,	Air Quality Study	•Evidence of coordination with and concurrence by MPO and air quality agencies	Y	Norma Sanchez	Clark Thompson /Rich Williams /WendyYoung	mail		271.09	X
165,10,35.	Water Quality Studies	Monitoring Report(s)	Y	Norma Sanchez	Clark Thompson /Rich Williams /Wendy Young	mail		231.04	X
165,10,35.	Water Quality Studies	Technical Report	Y	Norma Sanchez	Clark Thompson /Rich Williams /Wendy Young	mail		231.04	X
165.10.35.	Water Quality Studies	Technical report Abstract for use in Environmental Document text	Y	Norma Sanchez	Clark Thompson /Rich Williams /Wendy Young	mail		231.04	Х

Figure 9. Sample communication matrix (continued)

WBS Code	WBS Title	Sub-Product	Product Required on this Project? (Y/N)	Product Produced by (Task Manager Name)	Product Received by (Name of person receiving the product)	Method of Transmittal (mail, e- mail, fax, etc.)	Date of Submittal (one-time product) or Frequency (repetitive products)	Uniform Filing System Location	PHF
165,10,35.	Water Quality Studies	• Transmittal memo	Y	Norma Sanchez	Clark Thompson /Rich Williams /Wendy Young	mail		231.02	X
165,10,35.	Water Quality Studies	 Evidence of coordination with and concurrence by MPO and water quality agencies 	Υ	Norma Sanchez	Clark Thompson /Rich Williams /Wendy Young	mail		271.09	X
165,10,40,	Energy Studies	•Technical Report	N					231.04	X
165,10,40,	Energy Studies	Technical report Abstract for use in Environmental Document text	N					231.04	X
165,10,40,	Energy Studies	Transmittal memo	N					231.02	X
165.10.45.	Summary of Geotechnical Report	Technical report Abstract for use in Environmental Document text	Υ	CTHQ	Carelia Ordaz /Ben Amiri	mail		441.02	Х
165.10.50.	Preliminary Site Investigation for Hazardous Waste	• Technical Report	Υ	Ferouz Syed	Clark Thompson /Rich Williams /Wendy Young	mail		616.01	Х
165.10.50.	Preliminary Site Investigation for Hazardous Waste	Technical report Abstract for use in Environmental Document text	Y	Ferouz Syed	Clark Thompson /Rich Williams /Wendy Young	mail		616.01	Х
165,10,50.	Preliminary Site Investigation for Hazardous Waste	• Transmittal memo	Υ	Ferouz Syed	Clark Thompson /Rich Williams /Wendy Young	mail		616.01	X
165.10.55.	Draft Right of Way Relocation Impact Document	Technical Report and associated materials	Y	lan Jones	Clark Thompson /Rich Williams /Wendy Young	mail		464.01	
165,10,55.	Draft Right of Way Relocation Impact Document	• Technical Report	Υ	lan Jones	Clark Thompson /Rich Williams /Wendy Young	mail		464.01	
165,10,55,	Draft Right of Way Relocation Impact Document	Technical report Abstract for use in Environmental Document text	Y	lan Jones	Clark Thompson /Rich Williams /WendyYoung	mail		464.01	
165,10,55,	Draft Right of Way Relocation Impact Document	Transmittal memo	Y	lan Jones	Clark Thompson /Rich Williams /Wendy Young	mail		231.02	Х
165.10.60.	Location Hydraulic / Floodplain Study Report	Technical Report	Y	Ron Ho	Clark Thompson /Rich Williams /Wendy Young	mail		412.02	Х
165.10.60.	Location Hydraulic / Floodplain Study Report	• Technical report A• Transmittal memo	Y	Ron Ho	Clark Thompson /Rich Williams /Wendy Young	mail		411.01	
165.10.60.	Location Hydraulic / Floodplain Study Report	Transmittal memo	Y	Ron Ho	Clark Thompson /Rich Williams /Wendy Young	mail		411.01	
165,10,65.	Paleontology Study	Summary report of conclusions for inclusion in the Environmental Document.	Y	Mary Lee	Clark Thompson /Rich Williams /Karen Hill	mail		231.04	Х

Figure 10. Sample communication matrix (continued)

WBS Code	WBS Title	Sub-Product	Product Required on this Project? (Y/N)	Product Produced by (Task Manager Name)	Product Received by (Name of person receiving the product)	Method of Transmittal (mail, e- mail, fax, etc.)	Date of Submittal (one-time product) or Frequency (repetitive products)	Uniform Filing System Location	PHF
165.10.65.	Paleontology Study	Preliminary paleontological work plan	Y	Mary Lee	Clark Thompson /Rich Williams /Karen Hill	mail		241.01	
165.15.	Perform Biological Studies.	The biological study reports necessary for the preparation of the environmental document for a project.	Y	Ferouz Syed	Clark Thompson /Rich Williams /Karen Hill	mail			
165,15,05,	Biological Assessment	Biological Assessment Report	Υ	Ferouz Syed	Karen Hill /Rich Williams /FHWA	mail		231.04	X
165,15,05,	Biological Assessment	Documentation of coordination	Υ	Ferouz Syed	Karen Hill /Rich Williams/FHWA	mail		231.04	X
165,15,05,	Biological Assessment	Memo discussing recommended and/or required mitigation measures	Υ	Ferouz Syed	Karen Hill/Rich Williams/FHWA	mail		231.02	X
165,15,10,	Wetlands Study	Technical report	N					231.04	Х
165,15,10,	Wetlands Study	• Wetland Delineation materials	N					231.04	X
165,15,10.	Wetlands Study	Memo discussing recommended and/or required mitigation measures	N					231.02	X
165, 15, 15,	Resource Agency Permit Related Coordination	Documentation of various types of consultation and coordination for inclusion in other biological study	Y	Ferouz Syed	Jane Moore/Wendy Young	mail		231.04	X
165.15.20.	Natural Environment Study Report	Technical Report	Y	Ferouz Syed	Jane Moore/Wendy Young	mail		231.04	X
165,15,20,	Natural Environment Study Report	Abstract for use in Environmental Document	Y	Ferouz Syed	Jane Moore/Wendy Young	mail		231.04	X
165.15.20.	Natural Environment Study Report	Memorandum summarizing Technical Report, discussing impacts and their potential significance, and recommending or requiring mitigation measures	Y	Ferouz Syed	Jane Moore/Wendy Young	mail		231.02	Х

Figure 11. Sample communication matrix (continued)



GLOSSARY

Administrative Closure Consists of documenting project results to formalize acceptance of the

product of the project by the sponsor (or customer).

Conflict Management Prescribed method of resolving problems arising during the course of a

project.

Construction
Organization of
Project Documents

Standard filing system for project construction records.

Critical Path The set of activities that are critical to completing the project on schedule,

determines the duration of a project. The critical path changes as activities

are completed ahead of or behind schedule.

Customer A person or organization receiving a completed project deliverable.

External customers receive the final deliverable.

Deliverable A tangible project element with a scheduled completion date.

Filing System A numbering scheme used to identify different types of documents. In

order to quickly find and identify files, every Department document has a

file naming convention.

Project Charter Documents the agreement between the sponsor and the project manager

on the key elements of a project and component.

Project Development Uniform Filing System

The standard filing system for all project records and documents up until the award of the construction contract.

Project Fact Sheet

A summary of project information for external customers.

Project Milestone

Events

Used to measure the progress of a project. Signifies the start or completion

of a major project deliverable.

Stakeholders

Individuals and organizations who are actively involved in the project, or whose interests may be positively or negatively affected as a result of project execution or successful project completion.

Supplier A person or organization responsible for producing the required input to

begin a process or activity.

WBS Product List

A complete list of potential sub-products of a project.



ACRONYMS

DDDPPM Deputy District Director for Program and Project Management

HQ Headquarters

PDPM Project Development Procedures Manual

PDT Project Development Team

PHF Project History File

PID Project Initiation Document

PMSU Project Management Support Unit

PS&E Plans, Specifications, and Estimates

RBS Resource Breakdown Structure

WBS Work Breakdown Structure

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